



Professional Engineers  
and Geoscientists of BC

March 2010

# The 4th Dimension

Association of Professional Engineers and  
Geoscientists of BC  
Victoria Branch Newsletter  
[www.apeg.bc.ca/vic](http://www.apeg.bc.ca/vic)

**Next Event - Thursday March 25<sup>th</sup> - Talbot Award Dinner Meeting – UVic Cadboro Commons Building – 6pm. Our guest speaker is Dr. Mairi M.R. Best, Associate Director of Science, NEPTUNE Canada who will be discussing NEPTUNE Canada**

#### Schedule:

6:00 – 6:30 Social

6:30 – 7:30 Dinner (Campus Dinner Buffet)

7:30 – 8:45 Presentation by Guest Speaker

8:45 – 9:00 Talbot Award Presentations

#### Costs

\$37.50 = PEng/EIT/GIT

\$15= Students

\$5 = Lecture only – no dinner

Note: Sign up on the APEGBC web site. Limited seating – sign up early. Cash Bar

**Credit:** 1.0 Professional Development Hours (PDH)

**Note:** On-line registration through APEGBC (<http://www.apeg.bc.ca/> and go to Events)

If you have recently received your P.Eng., P.Geo, EIT or GIT and wish to receive your APEGBC certificate and complimentary dinner at this or upcoming events, please contact Magnus McElroy, Branch Chair at [magnus@shaw.ca](mailto:magnus@shaw.ca)

#### **Dr Mairi M.R. Best**

Associate Director (Science) for NEPTUNE Canada.

Mairi is a marine scientist interested in biological, physical, and chemical factors that control the preservation of calcium carbonate skeletons: our primary source of paleo-biological information and the primary way carbon is transferred from the atmosphere-ocean to the crust in the carbon cycle. Production and preservation of calcium carbonate are affected by ocean “acidification”. After her B.Sc. honours in Geology from Laurentian University, including scuba-based research on reefs of St Lucia, Mairi worked on fossil and modern reefs in Papua New Guinea through the Australian Institute of Marine Science. From there

she did a PhD at the University of Chicago with fellowships at the Smithsonian Tropical Research Institute. As assistant professor at McGill University, she expanded her research program into temperate and polar latitudes, including experiments deployed on the VENUS cabled observatory. She continues this research as an Adjunct Professor in the University of Victoria's School of Earth and Ocean Sciences.

Mairi fosters and facilitates the efforts of a growing community of NEPTUNE Canada scientists – those designing the pioneer suite of instruments and experiments deployed in 2009, and developing approaches to data analysis and integration. She also manages the integration between the vision of the scientific community and the engineering and information technology infrastructure.

### **Abstract:**

Data from across the disciplines of Ocean and Earth science are streaming live from the Northeast Pacific, and these data are freely and openly available to the world through the Internet. They are provided by the NEPTUNE Canada regional cabled ocean observatory which spans the northern Juan de Fuca Plate.

NEPTUNE Canada will transform our understanding of biological, chemical, physical, and geological processes across an entire tectonic plate from the shelf to the deep sea (17-2700m). Real-time continuous monitoring, archiving, and long time series allow scientists to capture the temporal nature, characteristics, and linkages of these natural processes in ways never before possible.

### **Congratulations to the remainder of those who received Certificates at the Burns Night Dinner and at the February 25<sup>th</sup> Dinner**

#### **BRADLEY BUCKHAM**



With expertise in underwater vehicle dynamics, Dr. Brad Buckham works to improve the technology of offshore systems and remotely operated vehicles (ROVs) used in deepsea explorations. Using computer simulations and experimental trials, Buckham studies dynamics and control of underwater vehicles to improve the human operator's ability to command location, direction, and speed. This research aims to improve the efficiency of deepsea exploration and environmentally benign resource extraction. A large part of Dr. Buckham's work is the evolution of a cable dynamics model – cable motions dominate the dynamics of any moored offshore system or ROV. Most recently, Dr. Buckham has partnered with SyncWave Energy Inc. in the design and optimization of a wave energy converter (WEC) affectionately referred to as CHARLOTTE.



**MAGGIE MAO.** Maggie received her BSc in Civil Engineering in 1988 at Southeast University Nanjing. She worked with the Jiangsu Provincial Communication Planning and Designing Institute in the Highway and Bridge designing office as a senior civil engineer. Since getting her MBA from UVic in 2007 she has been working with the BC Ministry of Transportation as an EIT.

**EDUARDO FAINBLUM P.Eng**

Eduardo Fainblum was born in Buenos Aires, Argentina.

He received his diploma in Telecommunications in 1978, and his B. Sc. degree in Electrical engineering from the National Technological University - in 1985. Then he worked for the private industry in several areas like: Automatic control, Telecommunications, Aerospace and Energy management, some of the positions he held include: Firmware design, Project manager, Regional training manager, Technical services manager and University Adjunct Assistant Professor. In 2003

he moved to Canada with his family first to Winnipeg MB, and then in 2006 to Victoria BC holding positions as: Manufacturing engineer, Product manager, and Senior Applications engineer. At present he works as an Energy solutions technical support team leader with Schneider Electric, where he manages a diverse team of application engineers located in the US and Canada. He speaks Spanish, English and Portuguese. Eduardo enjoys his free time with his wife and three children.

**CANER BUDAKOGLU**

I am a Ph.D. student at the Department of Electrical & Computer Engineering (ECE), University of Victoria under the supervision of Dr. Stephen W. Neville. I earned my M.A.Sc. in Electrical Engineering at ECE, University of Victoria under the supervision of Prof. T. Aaron Gulliver. I earned my B.Sc. in Electronics Engineering at the University of Istanbul, Turkey.

DAMINEH AKHAVAN, PENG, MBA – Picture and details to follow in the next newsletter

## 25<sup>th</sup> February Dinner Meeting at Rathskeller Restaurant



On Thursday, February 25th, 2010, following a delicious dinner of Schnitzel, Bratwurst, cabbage and Spätzle, the University of Victoria's Engineering Dean Tom Tiedje entertained and educated the assembled group of 30 Victoria Chapter members at the Rathskeller Restaurant. UVic is looking to expand their Engineering offerings with a degree in Mechanical Engineering - Civil/Structural Option that would become, in time, a stand-alone degree in Civil Engineering. Dean Tiedje presented many reasons for adding to the current suite of Mechanical, Electrical, and Computer Engineering degrees, including the fact that more Civil graduates are needed, per annum, within this province and that adding this option at UVic would

provide more local choices for those wanting to enter the profession and could potentially improve the present gender imbalance experienced at Uvic (data shows civil has a greater appeal to female students). The question period included comments regarding space requirements, timelines and long term objectives from the industry representatives in attendance. One of the students asked about bridging opportunities from Camosun's Civil

Engineering Technology Program; Dean Tiedje said the university is certainly looking at those opportunities and hoping to accommodate Civil bridge students in as few as four years, if the program is approved and if the faculty can prepare the curriculum and attract the right talent. Graduate courses will be concurrently developed with the undergraduate program. At this time, Dean Tiedje said his faculty is looking for industry feedback and support for this initiative. The Civil engineers present were open to further discussions to assist in the development of this new program, and the Victoria Branch Executive promised to write a letter of support.

**The 2010 Vancouver Island Regional Math Competition. Fun, Medals, Trophies, Snacks, Challenges, Travel. <http://www.apeg.bc.ca/mathchallengers/>**

The Victoria Math Challenge, sponsored again this year by the Victoria Chapter of the APEGBC was a great success with more participants than ever. Congratulations to the winners who were

- Gordon Head Middle
- Mount Doug
- Royal Oak
- SMU

#### **Next Executive Meeting**

Wednesday March 31<sup>st</sup> .Burnside Gorge Community Centre, 471 Cecilia Rd. 5:30pm

#### **Upcoming Events**

- **University of Victoria Industry Night**
- **Spaghetti Bridge Competitions**
- **Skills Canada Competitions**
- **Camosun College Open House**

#### **University of Victoria Industry Night:**

Date: Tuesday, March 23, 2010 (5:30pm - 8:30pm)

Location: University of Victoria - Engineering Laboratory Wing (Atrium)

5:30 - 6:00pm - Student Registration

6:00 - 7:00pm - Seminar

\* Establishing Your Engineering Career – Successfully Presenting Yourself to the Right Employers, Mr. Brent Lyon, P.Eng.

\* APEGBC Presentation

\* Industry Introductions

7:00 - 8:30pm - Student/Industry Mixer

APEGBC is working with the University of Victoria Engineering Student Society to host an Industry Night on March 23, 2010. The UVic Industry Night Seminar & Industry Reception focuses on providing engineering and geoscience students with tools to successfully

present themselves to the right employers as well as an opportunity to start building their industry contacts.

We are pleased to have Mr. Brent Lyon, P.Eng. as our speaker for this event. Brent specializes in recruiting senior and executive-level engineers for large-scale mining, transportation, and power projects. Prior to his time with David Aplin, Brent held progressively senior roles in technical sales, contract negotiation and project management, giving him extensive knowledge of BC's leading industries. Brent will be utilizing his extensive knowledge to provide several useful tips on how to successfully present yourself to the right employers.

As an engineering or geoscience professional in Victoria, we are pleased to extend you an invitation to our event. Your participation in this student/industry mixer will provide a valuable opportunity for students to hear about your industry experiences and gain advice as they prepare to enter the work force. We also offer sponsorship opportunities for this event. To become an Industry Sponsor, please download and complete our [Sponsor Form](#).

The agenda and details for our UVic Industry Night are as follows (light refreshments will be served):

### **Spaghetti Bridge Competitions**

For details of the competitions and the rules go to [http://civil.camosun.bc.ca/spaghetti\\_bridge/](http://civil.camosun.bc.ca/spaghetti_bridge/) . This web site will be updated with this year's details.

**Friday 26<sup>th</sup> March. Junior Competition (Grades 6 to 9)** in conjunction with the [Skills Canada competition](#) (see below) held at Camosun Interurban campus.

**Thursday 29<sup>th</sup> April. Senior Competition (Grades 10 to 12), Engineering Technology Students and Open Competition** (i.e. all others, such as Professional and Bridge students) in conjunction with the [Camosun Open House](#) (see below), at Camosun Interurban campus.

### **Skills Canada Competition**

#### **Friday 26<sup>th</sup> March.**

About 100 high school students will compete in 9 different trades and tech skills contests, for the right to represent South Vancouver Island at the upcoming Skills Canada BC provincial competition in Abbotsford, April. At the same time, more than 100 middle school students will compete in four different junior skills contests: wind turbine building; spaghetti bridge building; sumo robot wrestling; gravity car race. On top of all that, 1,400 grade 8 students will be bussed in for a variety of trades-oriented activities, thanks to funding by the Industry Training Authority (ITA). Overall Camosun contact is Kelly Knister, 370-4828

### **Camosun Open House**

#### **Thursday 29<sup>th</sup> April**

This is a college-wide event that showcases all of Camosun's programs. 3,000 high school students are expected to be here, participating in more than 100 hands-on activities in the TELUS Scavenger Hunt. New this year: CHEK News will be our media sponsor, shooting

footage for their Island 30 show. As details of this day get confirmed, we'll post updates at [www.camosun.ca/openhouse](http://www.camosun.ca/openhouse). Overall Camosun contact is Val Mieras, 370-4236. For Trades and Technology contact April Atkins, 370-4910

### Career Listings

The **Career Listings** email is sent weekly and is a service of APEGBC. To receive the career listing email messages, log in to the APEGBC Member Portal and update your e-mail subscriptions.

### A Call for Volunteers

If you are interested in joining the Branch Executive or know of potential candidates please forward these names to the Branch Chair Magnus McElroy or contact any member

### More Upcoming Events

#### **APEGBC, Victoria Branch**

Victoria Branch Dinner Meetings are generally held the third Thursday night of every month from September to May excluding December. Everyone is welcome to attend the Branch Executive meetings held every month. Please plan to come out, have fun, learn something, meet someone and support your profession!

#### **Vancouver Island Chapter of APEGBC**

The VI chapter would like to invite any of the Victoria chapter members to its monthly meetings.

#### **APEGBC**

APEGBC puts on a number of seminars and courses throughout the year. Although most of these are on the mainland there are a few on the island. The following is a list of those planned for the island in the next month or two. For a complete list and details please go to the APEGBC website at [www.apeg.bc.ca](http://www.apeg.bc.ca)

#### **Canadian Geotechnical Society (CGS)**

Meetings are normally held the third Friday of each month from September to May, excluding December. For details, the website is <http://www.cgs.ca/english/reg-div/vic-loc.html#news>.

#### **Engineering Institute of Canada (EIC), Vancouver Island Branch**

For information on the next meeting, please link to: <http://civil.camosun.bc.ca/vib-eic/>. Luncheon Meetings occur on the first Friday of the month (except July and August). For details, call Bruce Barnewall at 356-0762 or e-mail Bruce at [bruce.barnewall@gov.bc.ca](mailto:bruce.barnewall@gov.bc.ca)

#### **The Vancouver Island Advanced Technology Centre (VIATEC)**

VIATEC is the conduit that connects people, knowledge and resources to grow a successful technology sector on Vancouver Island. To learn more about VIATEC go to [www.viatec.ca](http://www.viatec.ca).

**Dave Bevan** – sadly, Dave Bevan, a Victoria Branch member passed away yesterday. More details in the next newsletter.

## Advertisements

While APEGBC – Victoria Branch is not in a position to endorse advertisements, we do provide them as a service to our members. The advertising rates are \$200 for eight continuous advertisements and \$30 for a single advertisement.

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